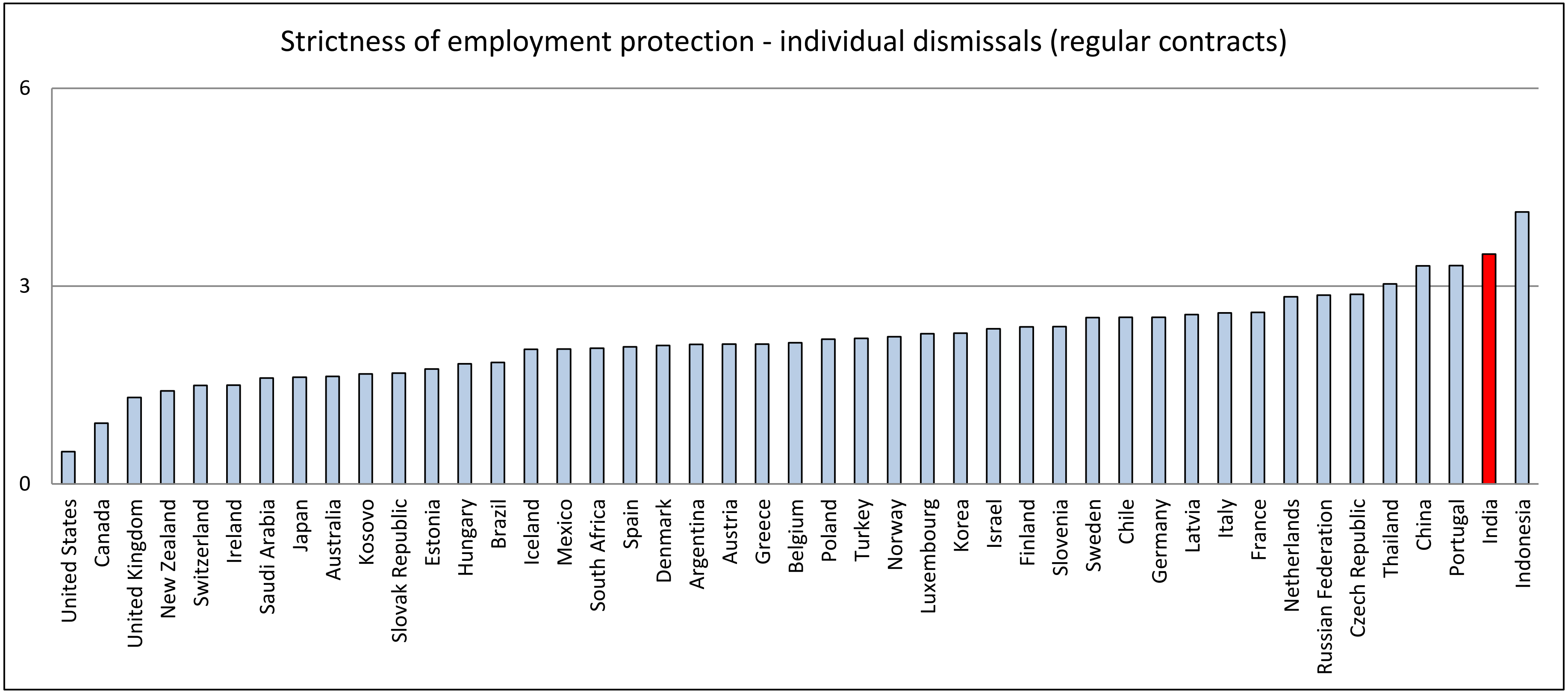
Labour Regulations in India

Much Ado About Something?

Based on ongoing research with P.P. Krishnapriya

India's labour laws are more rigid than those in most countries…



Source: OECD data 2012

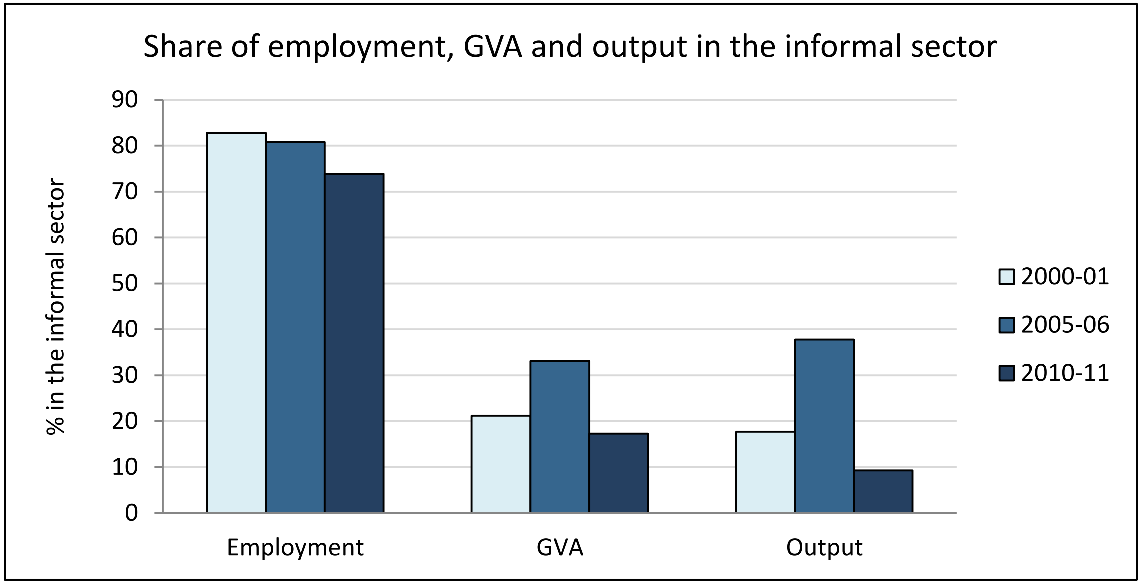
Studies on the impact of this de-jure rigidity

- Industrial performance weaker in states with pro-worker labour laws (**Besley and Burgess (2004), Aghion et al. (2005)**, **Topalova (2004**), and **Sanyal and Menon (2005).**

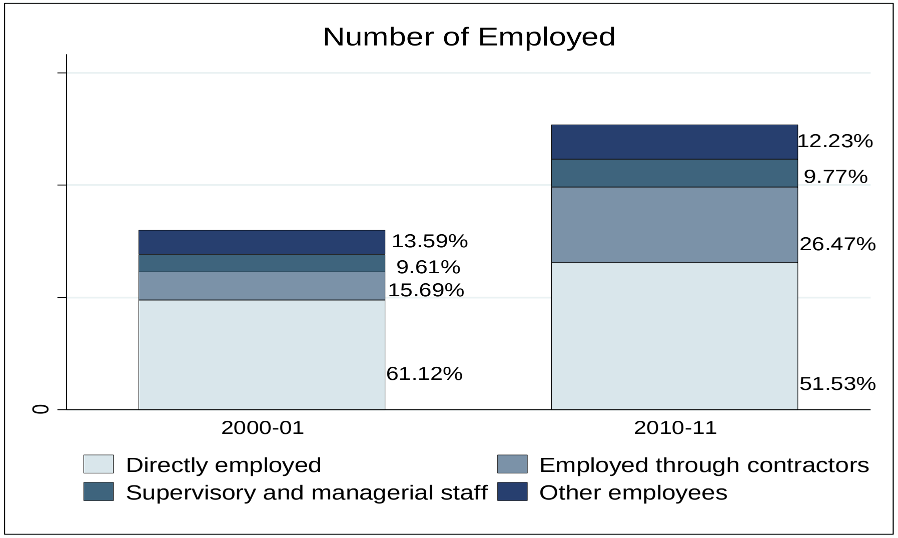
- **Hasan et al (2008)** construct a composite labour market regulation measure at state level and find that states with relatively inflexible labor regulations experienced slower growth of labour intensive industries and slower employment growth.

- **Dougherty et al (2011)** find that firms in labour intensive industries and in states with flexible labour laws have 14% higher TFP than their counterparts in states with more stringent labour laws.

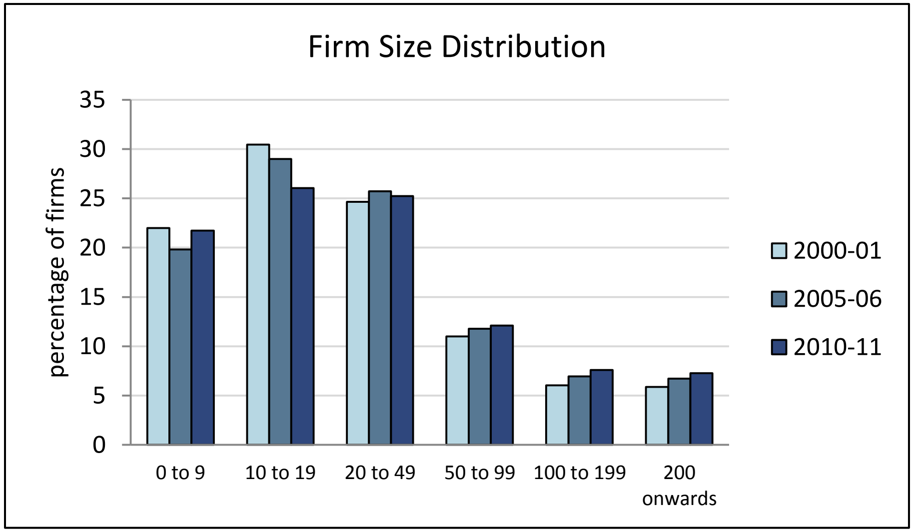
De-jure inflexibility co-exists with de-facto flexibility



Source: ASI and NSS data



Source: ASI published statistics



Source: ASI unit level data

Are labour regulations alone responsible for

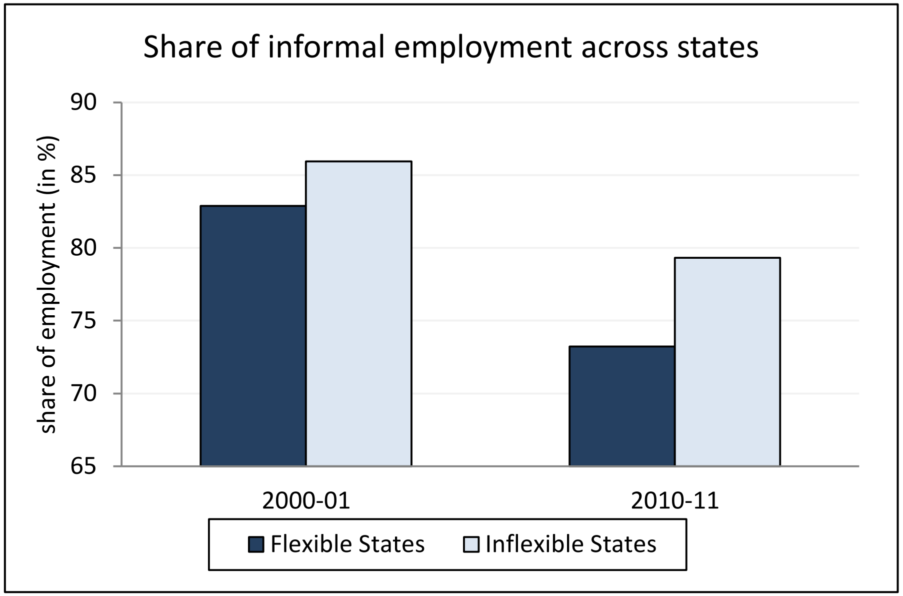
- *Dominance of Informal Sector*
- *Proliferation of Small Firms*
- *Increasing Contractualisation*

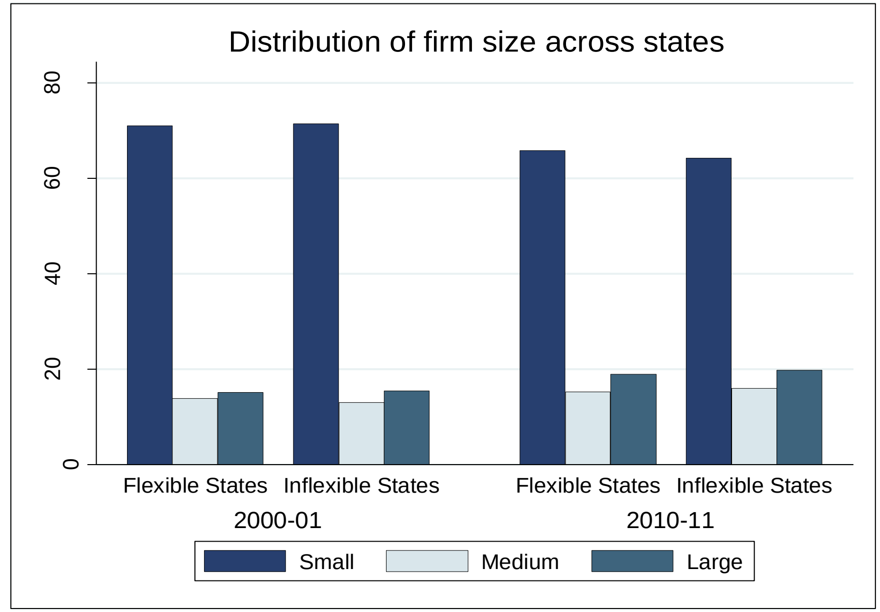
Or are there other factors at play?

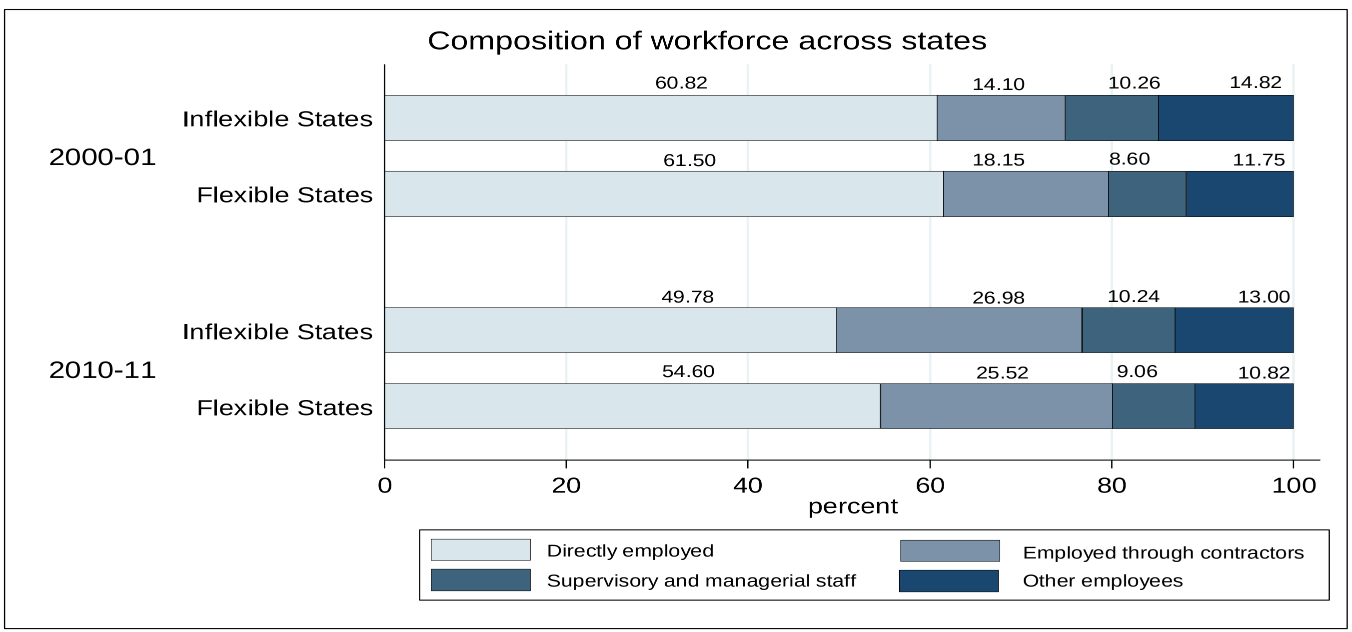
Data

- ASI database covers firms that are registered under the Factories Act (firms employing 10 or more workers using power, or 20 or more workers without using power).
- Time period: 2000-01 to 2011-12
- Provides us with firm level data on value added, output, employment(contract and regular workers), age, size, capital, and profits .
- Build a panel of state industry data on GVA and employment in the formal sector and compute their respective shares in the total employment and output in each industry *i* in state *s* at time *t*.
- Build a panel of state industry data on number of firms for three types of firms (small/medium/large industries) and compute their respective shares in each industry *i* in state *s* at time *t*.

Do Labour Regulations Really Bite?







Empirical Specifications

(1) $$ln\left(\frac{CW}{TW}\right)_{fist} = \theta_0 + \theta_1\, Time + \theta_2 LMR_s + \theta_3 PMR_s + \theta_4\left(\frac{W_c}{W_d}\right)_{fist} + \theta_5 Size_{fist} + \theta_6 Labour\ Intensity_{fist} + \varepsilon_{fist}$$

(2) $$\theta_{ist}^{formal} = \sum \alpha_i d_i + \sum \omega_s\, d_s + \ + \beta T + \mu LMR_s + \lambda(Other\ controls) + \varepsilon_{ist}$$

(3) $$\theta_{ist}^{k} = \sum \alpha_i d_i + \sum \omega_s\, d_s + \beta T + \gamma(Size\ Dummy) + \delta(Size\ Dummy * LMR_s) + \lambda(Other\ controls) + \varepsilon_{ist}$$

Stringent LMR are not the only factor incentivising firms to hire contract workers

	Dependent Variable: Share of Contract Workers in Total Workforce		
	(1)	(2)	(3)
LMR	-0.03*	-0.03*	-0.03**
	(0.01)	(0.01)	(0.01)
PMR	0.01	0.05***	0.06***
	(0.01)	(0.01)	(0.01)
$\ln(W_c/W_d)$	0.42*	0.39*	0.56*
	(0.19)	(0.24)	(0.25)
ln(size)		-0.01	0.27***
		(0.03)	(0.03)
$\ln(size^2)$			-0.03***
			(0.00)
time	0.02***	0.04***	0.04***
	(0.00)	(0.00)	(0.00)
N	69402	68556	68556

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Share of the formal sector is significantly lower in states with more stringent LMR

	Dependent Variable: Share of employment in formal sector		Dependent Variable: Share of real GVA in formal sector	
	(1)	(2)	(3)	(4)
LMR	0.10***	0.10***	0.04***	0.04***
	(0.01)	(0.01)	(0.01)	(0.01)
ln(SGDP)	0.16***	0.16***	-0.15	-0.15
	(0.03)	(0.03)	(0.10)	(0.10)
Physical Infrastructure Index	0.04**	0.05*	0.08***	0.07*
	(0.02)	(0.03)	(0.02)	(0.04)
Financial Development Index		0.09***		0.01
		(0.03)		(0.05)
State fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
Time	Yes	Yes	Yes	Yes
R-squared	0.72	0.72	0.63	0.63
N	2592	2592	2592	2592

No robust evidence to suggest that LMR affect firm size distribution

	Employment share	Firm share	Employment share	Firm share	Employment share	Firm share
Size 1: Small	-0.04***	0.20***	-0.05***	0.19***	-0.05***	0.19***
	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)
Size 2: Medium	-0.01***	0.04***	-0.01	0.04***	-0.01	0.04***
	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)
LMR*Size1	-0.01***	-0.01***	-0.00	0.01	-0.00	0.01
	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)
LMR*Size2	-0.00	0.00	0.00	0.01	0.00	0.01
	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)
LMR*Size3	0.00	-0.00	0.00	0.01	0.00	0.01
	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)
ln(teledensity)			-0.02	-0.02	-0.02	-0.02
			(0.01)	(0.01)	(0.01)	(0.01)
ln(bank credit per capita)					0.01	0.00
					(0.01)	(0.01)
Constant	0.13***	0.07***	0.16***	0.09***	0.19**	0.11
	(0.01)	(0.01)	(0.02)	(0.01)	(0.06)	(0.06)
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
N	11532	11532	2700	2700	2634	2634

The Road Ahead …

- India's labour laws give a high degree of protection to very few workers in the organised sector, while leaving a large proportion of its workforce unprotected against any contingencies and arbitrary actions of employers.
- There is an urgent need to reduce "dualism in the regulatory regime" by bringing in the largely excluded segments of the unorganized sector into a regulatory framework.

But

- Will reforming labour law in the way the government has done it till now create "good jobs" and a healthy industrial sector?
- Or will it simply free more employers from the obligations they currently hold for ensuring job security, health, and social protection of their workers, and further increase informal employment?